Strategies to Engage Online Students and Reduce Attrition Rates

Lorraine M. Angelino, *Clemson University*

Frankie Keels Williams, *Clemson University*

Deborah Natvig, *Lander University*

Abstract

Attrition continues to be a major issue in higher education. Attrition rates for classes taught through distance education are 10 – 20% higher than classes taught in a face-to-face setting. Educators should engage students early and often, using different learning strategies customized to the class content and the students' pre-existing knowledge. The goal for the professor is to develop relationships with the students such that they feel comfortable in the environment. The professor should facilitate learner-learner integration and collaboration so that they will learn from one another and expand their knowledge base together. Through an integrative literature review, this article presents key concepts in online learning and a review of different methods of engaging students with the goals of enhancing the learning process and reducing attrition rates.

Key Terms

Distance education, attrition, retention, engage, integration, persistence, online, learning, community, asynchronous

Introduction

National studies conducted by the National Center for Education Statistics (NCES) show that the number of institutions offering distance education courses and the number of students enrolling in distance education are increasing (Waits & Lewis, 2003). Even though more students are choosing distance education, the literature shows that attrition rates are higher in online courses than in face-to-face courses (Carr, 2000; Moody, 2004). Researchers indicate the pervasiveness of the high attrition rates and the clarion call to find strategies that will encourage students, educators, and institutions to become more effective in addressing this issue.

Finding ways to decrease attrition in distance education classes and programs is critical both from an economical and quality viewpoint. High attrition rates have a negative economic impact on universities. "The costs for development, delivery, and assessment, as well as lost tuition revenue, result in wasted expenditures for the institution" (Moody, 2004, p. 205).

In addition, to the economic reasons, attrition is a measure used to determine the quality of education delivered by an institution (Moody, 2004; Thompson, 1999). If there is a high attrition rate, the perception is that the institution has a quality problem. Identifying the reasons students drop or fail courses is critical in determining what services and delivery methods the institution will need to provide in order to ensure successful completion of distant education classes (Nash, 2005).

Definition of Terms

Distance education is a method of course delivery that uses "advanced electronic delivery systems" (Rovai, 2002, p. 1). Systems currently in use include broadcast television (Rovai, 2002), video and audio teleconferencing (Rovai, 2002), asynchronous learning networks (Rovai, 2002), asynchronous bulletin boards (Moody, 2004), and synchronous chats (Moody, 2004). Distance education is defined by the National Center for Education Statistics (NCES) as "education or training courses delivered to remote (off-campus) sites via audio, video (live or prerecorded), or computer technologies, including both synchronous (i.e., simultaneous) and asynchronous (i.e., not simultaneous) instruction" (Waits & Lewis, 2003, p. iii). Several terms that are essential for this article include attrition, persistence, and retention. Attrition refers to a

decrease in the number of students participating in course activities or a degree program. Attrition takes place when a student "drops" from the class role for a course or the student leaves a course of study (Martinez, 2003). Persistence refers to the act of continuing toward an educational goal such as earning a degree or certificate (Martinez, 2003). Retention is measured by the number of students that progress from one level to next in a degree program until either completion of the degree program or the student's personal goals are met (Center for the Study of College Student Retention [CSCSR], n.d.)

Purpose of the Study

The purpose of this integrative literature review is to explore strategies for reducing attrition in distance education classes. First, the issue of attrition in distance education within the context of higher education is presented. Prior research includes characteristics of students who enroll and drop out of distance education programs and the reasons given for attrition in these courses. Second, major strategies gleaned from the literature that have been effective in decreasing the attrition of students in distance education classes are described.

Methodology

The methodology for conducting an integrative literature review described by Jackson (1980) in *Methods for Integrative Reviews* and Cooper (1982) in *Scientific Guidelines for Conducting Integrative Research Reviews* was used for this study. Jackson (1980) describes, "A good review of research should explore the reasons for the differences in the results and determine what the body of research, taken as a whole, reveals and does not reveal about the topic" (p. 439).

Statement of the Problem

Most of the literature for this integrative review was written in the past 6 years. Some older writings were used either for historical purposes or as a second source to strengthen the argument set forth in the review. Carr (2000) was cited repeatedly in the literature with "anecdotal evidence" that online courses had higher attrition rates than traditional courses. There

was no national study to support this statement and upon searching the literature, no such study was available. While no national study was available, several colleges and universities, Dallas County Community College (Carr, 2000), University of Central Florida (Carr, 2000), University of California at Los Angeles (Carr, 2000), Mountain View College in Dallas (Carr, 2000), Tyler Junior College, Texas (Carr, 2000), West Texas A&M University (Terry, 2001), Coastline Community College, Fountain Valley, California (Nash, 2005) studied attrition rates and supported the statement that attrition rates were higher for online courses than traditional courses.

Researchers present the issue of attrition in distance education by discussing characteristics of online learners and attrition rates (Carr, 2000; Terry, 2001). Other researchers explain the statistical findings (Lewis, Snow, Farris, & Levin, 1999; Waits & Lewis, 2003), and reasons for attrition (Hara & Kling, 2001; Martinez, 2003; Moody, 2004; Nash, 2005).

Key Concepts about Attrition and Distance Education

Characteristics of online learners include learning styles (Diaz & Bontenbal, 2001) and demographics (Dutton, Dutton, & Perry, 2002). Overwhelmingly, researchers have discussed the needs of online students in the following areas: student integration and engagement (Carnevale, 2000; Minich, 1996; Nash, 2005; Tinto, 1975; Towles, Ellis, & Spencer, 1993; Wojciechowski & Palmer, 2005); the learner-centered approach (Anderson, 2004; Carnevale, 2000; Diaz & Bontenbal, 2000; Minich, 1996; Rovai, 2002; Tinto, 1993); learning communities (Anderson, 2004; Rovai, 2002; Tinto, 1993; Vgotsky, 1978; Wehlage, Rutter, & Smith, 1989; Wilson, 2001); and online student services (Hughes, 2004).

NCES (Lewis et al., 1999) reported that an estimated 1,363,670 students enrolled in college-level, credit-granting distance education courses in 1997-98 with 1,082,380 of the students at the undergraduate level. In 2000-01, the number of students enrolled increased to an estimated 2,876,000 with 2,350,000 of the students at the undergraduate level (Waits & Lewis, 2003). Based on these numbers, there was a 110% increase in student enrollment in distance education courses in 3 years.

Another key statistic was the change in the number of distance education courses. In 1997-98 an estimated 49,690 different college-level, credit-granting distance education courses were available to students, with 35,550 at the undergraduate level (Lewis et al., 1999). In 2000-01, the number of courses increased to 118,100 of which 89,600 were at the undergraduate level (Waits & Lewis, 2003). Based on these numbers, there was a 138% increase in the number of available distance education courses in 3 years.

Carr (2000) states that attrition rates in undergraduate distance education courses are 10 – 20% higher than face-to-face courses. Carr (2000) bases this information on "anecdotal evidence" (p. A39) and provides vignettes from studies done at various institutions since no national statistics are available for attrition rates in distance education. Carr (2000) also states that comparing attrition rates from institution to institution may be misleading since measurements of retention rates vary from one institution to another.

Terry (2001) studied graduate level business courses at West Texas A&M University (WT) to determine whether online or face-to-face courses had higher attrition rates. Terry (2001) concluded that some business disciplines such as accounting, economics, computer information systems, marketing, and management had online attrition rates comparable to their face-to-face counterparts. A key finding was that business statistics and finance courses had online attrition rates between 33% and 48% while face-to-face classes had attrition rates between 13% and 23% (Terry, 2001).

Nash (2005) conducted a study of students at Coastline Community College to discover reasons why they dropped or failed their distance education courses. In addition, the survey was a method of generating feedback from the student on ways to improve the online process or provide students with additional services in order to help them succeed (Nash, 2005). Nash (2005) found that the number one issue was time management; students either tried to accomplish too much in one semester or they had difficulty managing their time. Other issues included course assignments being too difficult, directions for assignments were unclear, and students could not get help when needed.

Martinez (2003) reported that "studies often cite personal reasons such as family problems, finances, child care, distractions, and job needs and demands as the cause of withdrawal" (p. 3). Moody (2004) adds that the course may be harder than the student originally thought or the student does not have the technology background.

Hara and Kling (2001) found that "students reported confusion, anxiety, and frustration due to perceived lack of prompt or clear feedback from the instructor, and from ambiguous instructions on the course website and in e-mail messages from the instructor" (p. 68). Some students also reported that they experience the feeling of isolation.

Distance learners are independent, self-directed, autonomous, internally motivated, and collaborative in some cases (Diaz & Bontenbal, 2001). They typically are 22 – 50 years of age, unable to enroll in traditional undergraduate programs due to other responsibilities, and often a lifelong learner. In addition, they have a job, could have childcare responsibilities, commute more than 10 miles to campus, and have computer experience (Dutton et al., 2002). Diaz and Bontenbal (2001) concluded that while "online students, in general, prefer independent learning situations; they are willing and able to participate in collaborative work if they have structure from the teacher to initiate it" (Learning Styles section, ¶ 6).

Strategies to Reduce Attrition

Attrition rates for undergraduate classes taught through distance education average 10 – 20% higher than face-to-face (Carr, 2000). Graduate level distance education courses in business statistics and finance have attrition rates 20 – 25% higher than face-to-face, while other business disciplines are comparable to their face-to-face counterparts (Terry, 2001).

The literature reviewed clearly provides four major strategies that may be used to decrease attrition in distance education courses. These strategies include student integration and engagement, learners centered approaches, learning communities, and accessibility to online student services.

Student Integration and Engagement. Tinto's (1975) theory suggests that students "integrated"

into the university setting both academically and socially will persist. Research in this area includes methods such as faculty-initiated contact via phone calls (Towles et al., 1993), pre-course orientations (Wojciechowski & Palmer, 2005), informal online chats (Carnevale, 2000), and online student services (Hughes, 2004). While Minich (1996) contends that early and frequent contact with students is critical, Nash (2005) reminds us "interactions can be time-consuming and difficult for faculty to sustain" (Methods to Improve Course Completion, ¶2).

Learner-Centered Approach. Diaz and Bontenbal (2001) present the differences between the traditional teacher-centered, instructive approach and the newer learner-centered, constructivist approach. The learner-centered approach "demands more active forms of classroom instruction that engage the student in the process of learning and that rely on student input for shaping instructional objectives" (Diaz & Bontenbal, 2001, Learning Theory section, ¶ 4).

In using the learner-centered approach, educators should open lines of communication with students as early as possible (Minich, 1996). They need to get to know their students and assess each student's pre-existing knowledge, cultural perspectives, and comfort level with technology (Anderson, 2004). Students need the opportunity to get to know each other and feel comfortable before learning can take place (Rovai, 2002; Tinto, 1993). Some tools used to accomplish these tasks are "virtual icebreakers" such as introductions (Anderson, 2004) and informal chat sessions (Carnevale, 2000). Once students are comfortable, the next step is initiating learning communities.

Learning Communities. The goal of learning communities is for students to work together and expand their knowledge base collaboratively (Anderson, 2004; Vygotsky, 1978). Distance learners have many challenges to overcome such as physical separation, feeling of isolation, lack of support, and feeling disconnected; learning communities can help. Wehlage, Rutter, and Smith (1989) found that a "supportive community" and "schools with exemplary dropout prevention programs" were the keys to providing students with a sense of belonging, membership, and engagement (Rovai, 2002). Tinto (1993) reported that students should develop relationships with members of their learning community (Rovai, 2002). As a result, the students would engage in the learning process with their cohorts (Wilson, 2001) thus reducing attrition

levels (Ravai, 2002). Rovai (2002) summarized it best in the following statement:

> Research provides evidence that strong feelings of community may not only increase persistence in courses, but may also increase the flow of information among all learners, availability of support, commitment to group goals, cooperation among members and satisfaction with group efforts. (p. 3)

Online Student Services. Distance learners are looking for online services that are easy to use and available at their convenience (Hughes, 2004). Hughes suggested that we should focus our efforts on meeting the needs of the learner; not on what is easy to deliver. Knowing the learner and the learner's needs is critical. Information that should be available for students includes assessments, educational counseling, administrative process such as registration, technical support, study skills assistance, career counseling, library services, students' rights and responsibilities, and governance. In order to maximize participation in student government, all meetings should be available in electronic format in an effort to engage distance learners (Hughes, 2004).

Summary of Key Findings

As the number of distance learners and the number of distance education courses continues to increase (Waits & Lewis, 2003), it is critical that educators put together a framework for engaging the distance learner with the goal of increasing persistence. Reducing attrition rates is critical to sustaining distance education since attrition rates are a measurement indicator for government funds (Parker, 2003) and the quality of education (Moody, 2004; Thompson, 1999). Student engagement and integration are key elements to student persistence (Tinto, 1975). Educators need to engage students early and often (Minich, 1996). Students need to feel comfortable in the distance education setting and have the opportunity to develop relationships with cohorts (Rovai, 2002; Tinto, 1993). Distance learners typically like to work independently but will participate in collaborative work if initiated by their instructor (Diaz and Bontenbal, 2001).

Educators should design courses that engage students and are learner-centered (Anderson, 2004; Serwatka, 2005). The MERLOT project is one source that educators can use to learn more about course design and the issues facing distance educators (Serwatka, 2005). E-Learning conferences are another avenue educators can pursue to learn more about distance learners.

Future Studies to Address the Gaps in the Literature

There are many opportunities to perform additional studies in an effort to find ways of decreasing attrition rates for distance learners. Several questions were uncovered during the integrative research process that can be the basis for additional studies. Does class size affect attrition rates? What characteristics should a professor possess in order to teach online courses? When should student engagement and integration begin and end? Other research studies may focus on the course design and the effect of learner-to-learner, learner to professor, and learner to content interactions.

Conclusion

Engaging students as early as possible and keeping them engaged is the key. In order to engage the student, educators must be adequately prepared with the techniques and strategies needed to teach effective online courses. (Serwatka, 2005). Table 1 outlines strategies for educators, along with rationale, to help facilitate student engagement in online courses in an effort to reduce attrition. Online is not just moving traditional coursework to the internet (Diaz, 2001; Serwatka, 2005).

TABLE 1. Strategies to Reduce Attrition

Strategy	Rationale
Student Integration and Engagement	
• Initiate contact with student via phone call.	• Early and frequent contact with students is critical.
• Conduct a pre-course orientation.	• Establishes a foundation for the learning environment for all students. Assess each student's pre-existing knowledge, cultural perspectives, and comfort level with technology to be used in class.
• Facilitate informal online chats through the course website.	• Encourages spontaneous interactions among students and faculty that may build positive relationships and the foundation for learning communities.
Learner-Centered Approach	
• Begin courses with "Virtual Icebreakers" to stimulate communication.	• Opens the lines of communication with students as early as possible.
• Post your introduction and encourage students to post their introduction.	• Allows all participants an opportunity to learn more about each other (student to student and instructor to student).
Learning Communities	
• Develop group projects and assignments that encourage students to develop relationships with other members of the learning community so together they can explore existing knowledge and expand their knowledge base together.	• Learning communities may help students overcome physical separation, feeling of isolation, lack of support, and feeling disconnected. Students that engage in the learning process with their cohorts may develop a sense of community thus reducing attrition levels.
Online Student Services	
• Provide online access to a variety of services including assessments, educational counseling, registration, technical support, study skills assistance, career counseling, library services, students' rights and responsibilities, and governance.	• Focuses on the learner's needs; not just, what is easy. Online students may have similar needs for assistance and resources as traditional students.
• Student government meetings on campus should be made available in electronic format.	• Provides distance education students an opportunity to participate in student governance as traditional students.

Prior to designing their first online course, educators should consider what online teaching requires. Educators may want to participate in a course design workshop and complete self–assessments tools to determine whether their teaching styles are compatible with online methods. E-learning conferences could incorporate more workshops that will assist educators in transitioning from the traditional classroom to the online classroom and include not only technology skills but also strategies to successfully engage and integrate distance learners.

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